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CONTRIBUTION TO THE DIAGNOSIS OF THE PROSTATE CARCINOMA

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The diagnosis of the prostate carcinoma is conventially based on conditions of the rectal palpation, the estimate of the serum acid phosphatase, and the roentgenography of the skeleton system. As to the last two methods mentioned, they only allow a positive statement in case the carcinoma has already transgressed the verge of the organ. Certain percentage of these bases is bound to come to our treatment via the orthopedist who, when hunting after the origin of complaints of lumbodnya, finds the metastases of the bone. Partly the carcinoma of the prostate is not olinically diagnosed at all. H o r s t m a n n in his necropsy output describes how only 43 % of then found prostate carcinomata had been clinically got hold of.

The serum acid phosphatase means a good help on occasion of the metastazing prostate carcinoma, though it may not be increased in each case. A raised value of the serum alkaline phosphatase accounts - with secured histological diagnosis - for osteoblastical bone metastases, even if it may not yet be possible to trace them radiologically.

If we set apart the carcinomata ascertained by X-ray examination and by the rise of the serum acid phosphatase there are left number of persons suspicious of carcinoma, where but the results of rectal palpation are hinting at this diagnosis. As far as here - perchance in case of adherent septum of the rectum - the verge of the organ should already be transgressed, there is need of an early diagnosing or of excluding the carcinoma. First, because the therapy is to be started immediately, then, because it does seem risky to include like cases in the success-statistics of any method of treatment whatever. Moreover, there must be as far as possible shed light on the question before one may brand a person as cancerous.

In these doubtful cases the possibilities for getting the matter fully explained are the following:

1.) cytological examination of the prostatic secretion,
2.) puncture biopsy of the prostate,
3.) transurethralic electro-resection,
4.) exploratory excision.

Cytological examination:
The cytological diagnosis is not of recent date and has on the domain of urology already taken root in the middle of the past century. S a n d e r s as early as 1864 described cells in the urinary sediment that he connected with malignant tumors of the urinary passages. After further precursors the cytological diagnosis was developed by P a p a n i c o l a o u and became as routine-examination serviceable for the clinic. There exists no strain whatever for the patient. But the degree of infallibility of the method is restricted, the conditions of the prostate secretion frequently being difficult to explain.

Puncture biopsy of the prostate:
By means of the puncture of the prostate we get a cylinder of tissue for histological investigation. Thus the amount of errors in the diagnosis becomes restricted. As to my knowledge this method was for the first time suggested by A s t r a l d i for diagnosticating the tumors of the prostate. Recently it has again been placed foremost by B o l l a c k and W i l d e g a n s. This method too does hardly mean any strain for the patient. The complications quoted, such as injuries of the bladder and the rectum, are said to be of no account. Though the puncture is carried out while directed by the finger introduced into the rectum, there exists the possibility of gliding past the focus of the carcinoma.

Transurethralic electro-resection:
The transurethralic electroresection shall be mentioned but shortly. We decline it, because of its taking off the tissue

at random and its possibilities limited but to a short extend. Besides, the intervention forbids itself in cases of serious bladder infection and severe angiectases.

Exploratory excision :

In our clinic we are therefore proceeding in the manner of first exposing the prostate on the ischio-rectal way. Fig. 1 displays the position of the patient, fig. 2 the scheme of the way of approach.

Fig. 1

Position of patient for exploratory excision

Fig. 2

Scheme of the way of approach to prostate

After bisection of the fibres of musculus levator ani (fig. 3) the rectum is medially displaced. Then there is free approach to the prostate, and a cuneous excision can be carried out. (fig. 4)

Fig. 3

The fibres of m. levator ani have been severed.

Fig. 4

Situation after the cuneous excision. The capsule of the prostate is being sutured.

The urethra is not opened during the process. The fact must be stressed on, that the excision takes place under the protective power of counter-sexual hormones.

Immediately the question turns up whether we are entitled to expect a patient to submit to this intervention as a means of diagnosis. We can answer in the affirmative. The value of a diagnostic method results from its degree of infallibility, as well as from the amount of bodily strain for the patient. Certainly the exploratory excision of the prostate is a more considerable intervention than the punoture. But it is tolerated well, and it does not endanger the patient. To compensate, the degree of its infallibility lies essentially higher than it is the case with the methods mentioned above. Within view and under free access for the finger the tissue district which arouses suspicion is determined and out out. The pathologist gets a piece of tissue large enough for investigation. Besides, this manner of proceeding is not purely diagnostic, as it will be shown later on in the discussion of the results. For, should the operation evidence that no carcinoma is existing, prostatectomy may follow at once.

Results:

In 22 cases we have carried out the exploratory excision in order to confirm or to exclude the existence of a prostate carcinoma. The indication for an intervention was given by imminent suspicion of carcinoma based on rectal palpation, provided no bone metastases could be statet, nor was the serum acid phosphatase raised simultaneously. Consequently, that number does not include those carcinomata that had only been recognized in the histological preparation after the prostatectomy having been carried out.

The table illustrates the results:

	No.
Total of exploratory excisions	22
carcinoma substantiated	15
prostatoliths	1
nodular adenomatosis	1
compact callosities of the capsule	5

Intensive treatment could be started without delay in the 15 cases substantiated. There was no carcinoma found with 1/3 of the patients examined. In one case multiple small prostatoliths were evacuated after the incision of the prostate capsule, having effected a compact and nodulated structure of the gland. Here the enucleation of an histologically benign adenoma was immediately annexed. In a second case there existed a compact-knotty adenomatosis. With five other patients it was the question of benign callous modifications of the prostate capsule. These seven patients have since remained free from carcinoma.

As it has already been emphasized in the beginning, the intervention carried out under sacral anesthesia does not mean any endangering of the patient worth mentioning. It was well tolerated by all patients who on the average were 64 years of age. We now employ this method in all questionable cases of carcinoma as one offering a really reliable foundation for the diagnosis of the prostate carcinoma.

Summary:

The diagnosis of a prostate carcinoma in its early stage is effected by means of rectal palpation. Here errors are possible though. To guarantee the carcinoma diagnosis the exploratory incision on the ischio-rectal way of approach under the protective power of counter-sexual hormones is recommended. This method owns a high degree of infallibility.

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